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APPLICANTS: Hammond et al.

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EXAMINER: S. Turner

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FOR: Prion-binding Ligands and Methods of Using Same

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PRELIMINARY AMENDMENT

Please amend the application as set forth below and consider the following remarks:

In the Claims:

a¹ 9. (Amended) The peptide ligand of claim 7, wherein said polypeptide comprises a retro-inverso isomer of the amino acid sequence D(GHPQGWG) (SEQ ID NO:34).

In the Specification:

On page 7, replace the paragraph beginning at line 10 with the following:

a² For example, in various embodiments, the peptide ligands are D retro-inverso peptides. The term "retro-inverso isomer" refers to an isomer of a linear peptide in which the direction of the sequence is reversed and the chirality of each amino acid residue is inverted. See, e.g., Jameson *et al.*, *Nature*, 368: 744-746 (1994); Brady *et al.*, *Nature*, 368: 692-693 (1994). The net result of combining D-enantiomers and reverse synthesis is that the positions of carbonyl and amino groups in each amide bond are exchanged, while the position of the side-chain groups at each alpha carbon is preserved. Unless specifically stated otherwise, it is presumed that any given L-amino acid sequence of the invention may be made into an D retro-inverso peptide by synthesizing a reverse of the sequence for the corresponding native L-amino acid sequence. To illustrate, if the peptide model is the prion binding ligand peptide 110: IQIWIF (SEQ ID NO:21), formed of L-amino acids, the retro-inverso peptide analog of this peptide (formed of D-amino acids) would have the sequence, FIWIQI (SEQ ID NO:38).